Message

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Subject: Hunters Point RESRAD BUILD/BPRG comparison

Julie/David/Jonathan/Stuart –

If I am interpreting the Navy's files correctly and did the math right, here is a comparison of estimated health risks to a resident associated with the Hunter's Point remediation goals for Ra-226, the most prevalent radionuclide at the Hunters Point site. (I used the "Navy BPRG" runs rather than the "EPA BPRG" runs.)

		Resident Risk (x 10-4)			
		Ingestion Risk	**Inhalation Risk**	**External Risk**	**Total Risk**
Ra-226	BPRG ("Navy")	2.7	-	0.17	**2.9**
	RESRAD BUILD	0.00382	0.00658	0.0194	**0.03**

Is my summary correct? If so, why are the ingestion risks so much higher for the BPRG calculator compared to RESRAD BUILD?

Although the absolute risks aren't as high, I noted a similar difference in the ingestion pathway for Th-232

		Resident Risk (x 10-4)			
		Ingestion Risk	**Inhalation Risk**	**External Risk**	**Total Risk**
Th-232	BPRG ("Navy")	0.5	-	0.082	**0.59**
	RESRAD BUILD	0.00146	0.0228	0.00981	**0.034**

And it looks like the external risks using BPRG are about 10 x higher for both, as well as a third radionuclide I looked at (Cs-137).

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